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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,666	07/02/2004	Sung Won Park	17910-002 US1	6567

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EXAMINER
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DARE, RYAN A

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/500,666		PARK, SUNG WON	
	<b>Examiner</b>		<b>Art Unit</b>	
	Ryan Dare		2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/02/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |



## DETAILED ACTION

### *Drawings*

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to because fig. 7 block S2 contains the spelling error "tread", where the word "threads" is intended. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet



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submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).



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- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The specification is objected to because it is not in the format listed above. In addition, the section headers are in bold or underlined type.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5, 7-9 and 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. With respect to claims 3, 7 and 11, The Examiner does not know what Applicant means by "wherein said predetermined size of unit data is divided with 20~25 Mbytes when the block size is multiplied by the number of blocks." In addition, it is also unclear whether the 20 or 25 Mbyte size can vary or if a fixed value must be selected, and if the value has to be 20 or 25 or if it can be any value in between. Also, there appears to be lack of antecedent basis for "the block size." The Examiner politely requests Applicant's assistance in explaining the patent protection sought by claims 3, 7 and 11 or the rewording of said claims such that it is clear to one of ordinary skill in the art.



7. Claim 1 recites the limitation "the command" in line 4, "the predetermined command" in line 5 and "the backup operating command" in line 10. There is insufficient antecedent basis for these limitations in the claim.

8. Claim 2 recites the limitation "the backup operating command" in line 2, "the backup reservation information" in line 7 and, "the backup command" in lines 8-9. There is insufficient antecedent basis for these limitations in the claim.

9. The above rejections under 35 U.S.C. 112 due to indefiniteness are exemplary. The Examiner requests Applicant's assistance in correcting all problems with antecedent basis, such as those listed above.

10. With respect to claims 4-5, 8-9 and 12-13, the scope of patent protection to which Applicant seeks is unknown. In claim 4, Applicant claims a volume backup when a backup object disk has more than one hundred thousand files. In claim 5, Applicant claims a file backup when a backup object disk has more than one hundred thousand files. The specification fails to clearly distinguish between a file backup and a volume backup. This leads the Examiner to believe that Applicant may be trying to claim that the same backup occurs no matter how many files are in a volume, since more than 100,000 files and less than 100,000 files are both included. A file backup is mentioned on pages 5-6, however it seems the rest of the specification is directed towards a volume backup with blocks of a certain size, not of individual files. Claims 8-9 and 12-13 are rejected for similar reasons.



***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-2, 6, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Beeler, Jr., US Patent 5,974,563, hereafter "Beeler".

13. With respect to claim 1, Beeler teaches a system of high-speed and bulk backup comprising:

a backup object disk whereon a backup object data to be stored, in fig. 3, the Source Server Hard Disk 32.

a backup disk whereon the backup object data to be compressed and stored, in fig. 3, the Target Server Hard Disk 34.

an input/output unit, wherein the command including backup operating commands is input and the results from the predetermined command is output, in fig. 13, Operating System 136. It can be seen also in fig. 13 that the commands are input from the User Workstation 137.

a backup means, wherein a volume of data on said backup object disk is divided into a predetermined size of unit data, a plurality of threads running several flows within a process are generated and thereby said divided unit data is sequentially compressed and stored onto said backup disk, in col. 9, lines 33-36 where it is described that the



data is divided into units of data(packets). It is disclosed that the packets can be compressed in certain embodiments, in col. 17, lines 9-12.

a central processing unit, wherein the backup operating command supplied through said input/output unit is processed for implementing a backup using said backup means, in fig. 2, CPU 22.

14. With respect to claim 2, Beeler teaches the system of high-speed and bulk backup of claim 1 comprising:

a backup master module, wherein the backup operating command supplied through said input/output unit and central processing unit is received and transmitted to a backup manager module, in fig. 13, File System Interface 132.

a backup manager module, wherein a backup operating command required for implementing a backup is received from said backup master module and thereby the backup reservation information for each volume is managed, a backup status and backup history information for each volume is collected and managed, and the backup command for a disk volume according to a backup schedule is generated, in fig. 13, Source Replication Manager 133.

a backup agent module, wherein a backup command is supplied from said backup manager module and thereby the volume of data on said backup object disk is divided into a predetermined size of unit data, a plurality of threads running several flows within a process are generated and thereby said divided unit data is sequentially compressed and stored onto said backup disk, in fig. 13, Source Communications Manager 134.



Please see the relevant parts of the specification that discuss fig. 13, such as col. 12, line 4 through col. 13, line 32.

15. With respect to claim 6, Beeler teaches a system of high-speed and bulk backup comprising:

a backup master server including a backup master module receiving a backup operating command, in fig. 13, FSI 132.

a backup manager server including a backup object disk whereon the backup object data is stored, a backup disk whereon the backup object data is compressed and stored, a backup manager module wherein the backup operating command required for backup operation for a volume of disk is generated according to a backup schedule, and a backup agent module wherein according to the backup commands supplied from said backup manager module, the volume of data on said backup object disk is divided into a predetermined size of unit data, a plurality of threads running several flows within a process are generated, and thereby said divided unit data is sequentially compressed and stored onto said backup disk, in fig. 13, SRM 133 and SCM 134, and in col. 9, lines 33-36 where it is described that the data is divided into units of data(packets). It is disclosed that the packets can be compressed in certain embodiments, in col. 17, lines 9-12.

Please see the relevant parts of the specification that discuss fig. 13, such as col. 12, line 4 through col. 13, line 32.

16. With respect to claim 10, Beeler teaches a system of high-speed and bulk backup comprising:



a backup master server including a backup master module receiving a backup operating command, in fig. 13, FSI 132.

a plurality of backup manager servers including a backup object disk whereon the backup object data is stored, and a backup manager module wherein the backup operating command required for backup operation is received from said backup master server and thereby the backup command for a volume of disk is generated according to a backup schedule, in fig. 13, SRM 133. We know that there can be many servers, from the embodiment of fig. 4, where there are multiple source servers 42; and

a plurality of backup agent servers including a backup disk whereon the backup object data is compressed and stored, and a backup agent module wherein according to the backup command supplied from said backup manager module, the volume of data on said backup object disk is divided into a predetermined size of unit data, a plurality of threads running several flows within a process are generated, and thereby said divided unit data is sequentially compressed and stored onto said backup disk, in fig. 4, SCM 134. We know that there can be many agents, from the embodiment of fig. 4, where there are multiple source servers 42. Also, see col. 9, lines 33-36 where it is described that the data is divided into units of data(packets). It is disclosed that the packets can be compressed in certain embodiments, in col. 17, lines 9-12.

Please see the relevant parts of the specification that discuss fig. 13, such as col. 12, line 4 through col. 13, line 32.



***Allowable Subject Matter***

17. Claims 3-5, 7-9 and 11-13 may be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Beeler does not teach how to compute the block size. In addition, Beeler does not teach using the number 100,000 to choose between file backup and volume backup. Further clarification as requested above may render these claims allowable.

***Conclusion***

18. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar backup systems.

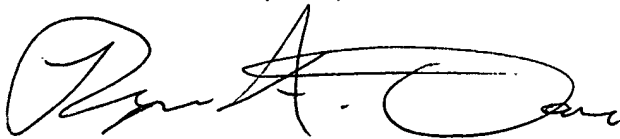
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Dare whose telephone number is (571)272-4069. The examiner can normally be reached on Mon-Fri 9:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571)272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan A. Dare  
May 1, 2006



MATTHEW KIM  
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